Name:

## at1110paper_practice_test (v16)

1. Expand the following expression into standard form.

$$(9x + 7)(9x - 7)$$

$81x^2 - 63x + 63x - 49$

$81x^2 - 49$

2. Factor the expression.

$$81x^2 - 64$$

$(9x + 8)(9x - 8)$

3. Expand the following expression into standard form.

$$(7x + 2)^2$$

$49x^2 + 14x + 14x + 4$

$49x^2 + 28x + 4$

4. Expand the following expression into standard form.

$$(7x - 9)(4x + 5)$$

$28x^2 + 35x - 36x - 45$

$28x^2 - x - 45$

5. Solve the equation.

$$(3x-4)(5x-2) \;=\; 0$$

$x = \frac{4}{3}$ $\qquad$ $x = \frac{2}{5}$

6. Solve the equation.

$$4x^2 - 18x + 12 \;=\; 2x^2 - 3x + 5$$

$2x^2 - 15x + 7 = 0$

$(2x-1)(x-7) = 0$

$x = \frac{1}{2}$ $\qquad$ $x = 7$

7. Solve the equation with factoring by grouping.

$$15x^2 + 20x - 18x - 24 \;=\; 0$$

$(5x-6)(3x+4) = 0$

$x = \frac{6}{5}$ $\qquad$ $x = \frac{-4}{3}$

8. Factor the expression.

$$x^2 - 11x + 28$$

$(x-7)(x-4)$